

AMENDMENTS TO THE CLAIMS:

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Please cancel claims 6-8.

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Please add new claims 13-17.

AF Claim 1. (Withdrawn) A solar still, said still including a base having side walls, a solar absorbing member and a glass cover over the absorbing member, characterised that the solar still has means to cast a shadow to enable the solar still to be orientated, with reference to the solar radiation to increase the efficiency thereof.

Claim 2. (Withdrawn) A solar still as defined in claim 1 wherein the means to cast a shadow include a recess in a side wall opening to the top of the side wall, the recess having an arcuate wall and an inner wall, and a nodus extending from the inner wall whereby the nodus can cast a shadow on the arcuate wall to facilitate the orientation of the still with respect to the sun.

Claim 3. (Withdrawn) A solar still as defined in either claim 1 or claim 2, wherein the solar still is of the tilted tray type, and the absorbing member includes a plurality of individual cells containing the solution to be evaporated.

Claim 4. (Withdrawn) A solar still, said still including a base having side walls, a solar absorbing member and a glass cover over the absorbing member, wherein the absorbing member is a black sheet of material containing the cells, the still including a reflector positioned beneath the black sheet of material of redirect the black-body long wavelength radiation to be absorbed by the sheet of material to enhance the overall heat gain.

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Claim 5. (Withdrawn) A solar still as defined in claim 4 wherein the reflector is a long wavelength reflector, preferably aluminum foil positioned directly beneath the black sheet of material.

Claim 6. (Cancelled)

Claim 7. (Cancelled)

Claim 8. (Cancelled)

Claim 9. (Withdrawn) A solar still, said still including a base having side walls, a solar absorbing member and a glass cover over the absorbing member, characterised that the solar still has means to cast a shadow to enable the solar still to be orientated with reference to the solar radiation to increase the

efficiency thereof, and wherein the absorbing member is a black sheet of material containing the cells, the still including a reflector positioned beneath the black sheet of material to redirect the black-body radiation to the absorbed by the sheet of material to enhance the overall heat gain, and wherein the absorbing member is provided with means to substantially eliminate to prevent thermal distortion of the absorbing member.

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A Claim 10. (Withdrawn) A solar still as defined in claim 10, wherein there is provided a drip check on the undersurface of the glass cover to direct the distillate into a distillate outlet, in the still.

Claim 11. (Withdrawn) A solar still, said still including a base having side walls, a plurality of individual cells formed in a solar absorbing member, and a glass sheet positioned above the cells, the sheet being positioned adjacent to the solar cells at a distance such that the vapor produced in each cell produces turbulence in each cell, the combined effect of the turbulence in all cells minimizing convective flow of air and vapor along the undersurface of the glass.

Claim 12. (Withdrawn) A solar cell as defined in claim 11 wherein the glass sheet is positioned in the range of 10 to 20 mm above the cells.

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Claim 13. (New) A solar still of the tilted tray type, said still including a base and upstanding side walls, a solar absorbing member supported by said base, said side walls supporting a glass cover positioned over said absorbing member on which vapor condenses, said solar absorbing member comprising a panel of black material having a plurality of individual cells over which water flows, and a thermal expansion member including one of a dome and a recess formed in the bottom of each cell to substantially eliminate or prevent distortion if the absorbing member.

Claim 14. (New) The solar still according to claim 13, including a long wavelength reflector positioned beneath the black material panel to redirect long wavelength radiation absorbed by the black panel to enhance the overall heat gain.

Claim 15. (New) The solar still according to claim 13, wherein the glass cover is positioned adjacent the solar cells at a distance whereby vapor produced in each cell produces turbulence in each cell and wherein, the combined

effect of the turbulence in all cells minimizes convective flow of air and vapor along the underside of the glass.

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Claim 16. (New) A solar still according to claim 15, wherein the glass cover is positioned within the range of 10 to 20 mm above the top of the cells.

Claim 17. (New) A solar still according to claim 12, wherein the dome is circular and is upstanding above the bottom of the cell by 5 or 6 mm.
